

AMENDMENTS TO THE CLAIMS:

Please amend Claims 6, 9, 13, 14, 29, 32 through 35, 37 through 39, 41, 58, and 60 as follows:

1 - 3. (Cancelled)

4. (Previously Presented) A method according to claim 60, wherein the entry node modifies the size of the synchronization second packet, so that the sum of the reduced size of the preceding second packet and the modified size of the synchronization second packet is equal to the normal size of a second packet.

5. (Previously Presented) A method according to claim 60, wherein the entry node manages a mechanism, put into effect at each change in access level, for obtaining a current distance in memory, between a stored position of a forthcoming start of a first packet and a current position of a read pointer used for the construction of the second packets.

6. (Currently Amended) A method according to claim 5, wherein the entry node performs steps comprising: ~~the following steps:~~

the entry node ~~obtains~~ obtaining said current distance;

if the current distance is equal to zero, the entry node ~~generates~~ generating and ~~sends~~ sending a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the second access level, ~~this~~ the synchronization second packet comprising a synchronization marker;

if the current distance is smaller than the normal size of a second packet, the entry node ~~generates and sends~~ generating and sending a truncated second packet, known as a preceding second packet, whose reduced size is equal to the current distance, and then ~~generates and sends~~ generating and sending a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the second access level, ~~this~~ the synchronization second packet comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of the second packet, the entry node ~~sends~~ sending a normal-sized second packet which is not a synchronization second packet.

7. (Previously Presented) A method according to claim 60, wherein, at each change in access level, the entry node also inserts an access level change marker into the synchronization second packet.

8. (Previously Presented) A method according to claim 60, wherein the association of an access level with each first packet is based upon restriction on the use of the data stream and wherein the access level comprises use restriction information.

9. (Currently Amended) A method according to claim 60, wherein the association of an access level with each first packet is based on the use of a plurality of time slots, and wherein the entry node:

(a) obtains ~~the~~ a time slot, among the plurality of time slots, that includes the instant of processing, by the entry node, of ~~the given~~ a first packet; and

(b) associates one of the access levels with the first packet as a function of the time slot obtained.

10. (Previously Presented) A method according to claim 60, wherein the association of an access level with each first packet is based on the use of a plurality of pieces of control information that can be contained in the first packets, and

wherein the entry node:

(a) obtains at least one piece of control information, from among the plurality of pieces of control information, contained in a particular first packet; and

(b) associates one of the access levels with the particular first packet as a function of said at least one piece of control information obtained.

11. (Previously Presented) A method according to claim 9, wherein the association of an access level with each first packet is based on the use of the plurality of time slots and said plurality of pieces of control information, and

wherein the entry node:

(a) obtains the time slot, among the plurality of time slots, that includes the instant of processing, by the entry node, of a particular first packet;

(b) obtains at least one piece of control information, from among the plurality of pieces of control information, contained in the particular first packet; and

(c) associates one of the access levels with the particular first packet as a function of the time slot obtained and said at least one piece of control information obtained.

12. (Previously Presented) A method according to claim 60, wherein the data stream is transmitted by an entry terminal, and

wherein the entry terminal is a digital type of terminal connected to the entry sub-network and directly generating the data stream in the form of first packets.

13. (Currently Amended) A method according to claim 60, wherein the data stream is transmitted by an entry terminal, and

wherein the entry terminal is an analog type terminal, connected to the entry sub-network by means of an independent adapter enabling ~~the~~ a conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

14. (Currently Amended) A method according to claim 60, wherein the data stream is transmitted by an entry terminal,

wherein the entry terminal is an analog type terminal directly connected to the entry node, and

wherein the entry node integrates an adapter enabling ~~the~~ a conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

15. (Previously Presented) A method according to claim 60, wherein the data stream is transmitted by an entry terminal, and

wherein the entry terminal is integrated into the entry node and the entry node directly generates the data stream in the form of first packets.

16 - 28. (Cancelled)

29. (Currently Amended) An entry node for the insertion of broadcast control information for the control of the broadcasting of a data stream transmitted in a heterogeneous network, the heterogeneous network including at least one entry sub-network conveying first packets and a basic network conveying second packets, the entry node being connected to the basic network and to the entry sub-network, wherein the entry node ~~comprises~~ is configured to:

~~means for successively receiving~~ receive first packets from the entry sub-network;

~~means for associating~~ associate an access level with each first packet from among a plurality of access levels according to a predetermined policy;

~~means for forming~~ form each second packet by including in each second packet one or more first packet or parts of a first packet associated with a first access level;

~~means for inserting~~ insert, into each second packet, broadcast control information corresponding to the first access level;

~~means for detecting of~~ detect a change in access level between the first access level and a second access level between successive first packets of the data stream;

~~means for forming~~ form a synchronization second packet by inserting a synchronization marker in a second packet;

~~means for reducing~~ reduce the size of the second packet preceding the synchronization second packet such that the start of the payload information of the synchronization second packet corresponds to the start of a first packet associated with the second access level; and

~~means for transmitting~~ transmit second packets into the basic network.

30 - 31. (Cancelled)

32. (Currently Amended) An entry node according to claim 29, further ~~comprising~~ ~~means for modifying~~ being configured to modify the size of the synchronization second packet, so that the sum of the reduced size of the preceding second packet and the modified size of the synchronization second packet is equal to the normal size of a second packet.

33. (Currently Amended) An entry node according to claim 29, further ~~comprising~~ ~~means, activated~~ being configured to, at each change in access level, ~~for the management~~

~~of a~~ manage a mechanism to obtain a current distance in memory, between a stored position of a forthcoming start of a first packet and a current position of a read pointer used for the construction of the second packets.

34. (Currently Amended) An entry node according to claim 33, further ~~comprising means of selective activation as a function of the value of the current distance obtained, such that~~ being configured to cause:

if the current distance is equal to zero, ~~the activation means activates means for the~~ generation and sending of a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the second access level, ~~this~~ the synchronization second packet comprising a synchronization marker;

if the current distance is smaller than the normal size of a second packet, ~~the activation means activates means for the~~ generation and sending of a truncated second packet, known as a preceding second packet, whose reduced size is equal to the current distance, and then ~~means for the~~ generation and sending of a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the second access level, ~~this~~ the synchronization second packet comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of the second packet, ~~the activation means activates means for the~~ sending of a normal-sized second packet which is not a synchronization second packet.

35. (Currently Amended) An entry node according to claim 29, further ~~comprising means for inserting~~ being configured to insert, at each change in access level, ~~of an access level change marker into the synchronization second packet.~~

36. (Previously Presented) An entry node according to claim 29, wherein the policy of association of an access level with each first packet is based upon restriction on the use of the data stream, and  
wherein the access level comprises use restriction information.

37. (Currently Amended) An entry node according to claim 29, wherein the policy of association of an access level with each first packet is based on the use of a plurality of time slots, and

wherein the entry node ~~comprises~~ is configured to:

(a) ~~means for obtaining the~~ obtain a time slot, among the plurality of time slots, that includes the instant of processing, by the entry node, of ~~the given~~ a first packet; and

(b) ~~means for associating~~ associate one of the access levels with the first packet as a function of the time slot obtained.

38. (Currently Amended) An entry node according to claim 29, wherein the policy of associating an access level with each first packet is based on the use of a plurality of pieces of control information that can be contained in the first packets, and

wherein the entry node ~~comprises~~ is configured to:

(a) ~~means for obtaining~~ obtain at least one piece of control information, from among the plurality of pieces of control information, contained in a particular first packet; and

(b) ~~means for associating~~ associate one of the access levels with the particular first packet as a function of ~~said~~ the at least one piece of control information obtained.

39. (Currently Amended) An entry node according to claim 37, wherein the policy of associating an access level with each first packet is based on the use of the plurality of time slots and the plurality of pieces of control information, and

wherein the entry node ~~comprises~~ is configured to:

(a) ~~means for obtaining~~ obtain the time slot, among the plurality of time slots, that includes the instant of processing, by the entry node, of a particular first packet;

(b) ~~means for obtaining~~ obtain at least one piece of control information, from among the plurality of pieces of control information, contained in a particular first packet; and

(c) ~~means for associating~~ associate one of the access levels with ~~the~~ a particular first packet as a function of the time slot obtained and the at least one piece of control information obtained.

40. (Previously Presented) An entry node according to claim 29, wherein the entry node is directly connected to an entry terminal of analog type, which transmits the data stream, and

wherein the entry node integrates an adapter enabling the conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

41. (Currently Amended) An entry node according to claim 29, wherein the entry node comprises an entry terminal, which transmits the data stream, and

wherein the entry node ~~comprises means for the~~ is configured to direct generation of directly generate the data stream in the form of first packets.

42. (Original) An entry node according to claim 29, wherein the heterogeneous network is a home audiovisual network.



43. (Original) An entry node according to claim 29, wherein the first packets are IEEE 1394 type packets.

44. (Original) An entry node according to claim 29, wherein the basic network is a switched network.

45 - 57. (Cancelled)

58. (Currently Amended) A non-transitory computer-readable storage means medium storing computer program instructions for programming a programmable processing apparatus to become configured as an apparatus ~~as set out~~ as recited in claim 29.

59. (Cancelled)

60. (Currently Amended) A method for the insertion of broadcast control information for the control of the broadcasting of a data stream in a heterogeneous network, the heterogeneous network including at least one entry sub-network conveying first packets and a basic network conveying second packets, the entry sub-network being connected to the basic network by an entry node configured to form the second packets from at least part of at least one first packet, wherein the entry node performs ~~[[a]]~~ the method comprising: ~~the steps of:~~

successively receiving first packets from the entry sub-network;

associating an access level with each first packet from a plurality of access levels according to a predetermined policy;

forming each second packet by including in each second packet one or more first packets or parts of a first packet associated with a first access level, and inserting into each second packet broadcast control information corresponding to the first access level; and transmitting the second packets formed in the forming step into the basic network, wherein, if the access level changes from the first access level to a second access level between successive first packets of the data stream, the entry node (a) forms a synchronization second packet by inserting a synchronization marker in a second packet, and (b) reduces the size of the second packet preceding the synchronization second packet such that the start of the payload information of the synchronization second packet corresponds to the start of a first packet associated with the second access level.